

PLAN ID: APARTMENT HOUSE - Option 2 Low-Slope Apartment House

DESCRIPTION:

2 LEVEL 3 BED 3 BATH 2,338 SQ. FT.

APPLICABLE CODES:

RESIDENTIAL CODE: 2015 INTERNATIONAL RESIDENTIAL CODE  
ACCESSIBILITY: 2009 ANSI A117.1 & TEXAS ACCESSIBILITY STANDARDS FAIR HOUSING



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COVER SHEET

A0 GENERAL INFORMATION

A0.1 GENERAL INFORMATION

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A3 EXTERIOR ELEVATIONS & BUILDING SECTIONS

A4 WALL SECTIONS & TYPICAL DETAILS

CODE RESEARCH

APARTMENT HOUSE  
Option 2 Low-Slope Apartment House  
BRYAN, TEXAS

JOB NO.  
180012  
ISSUE DATE  
8/25/20  
CD

REVISIONS

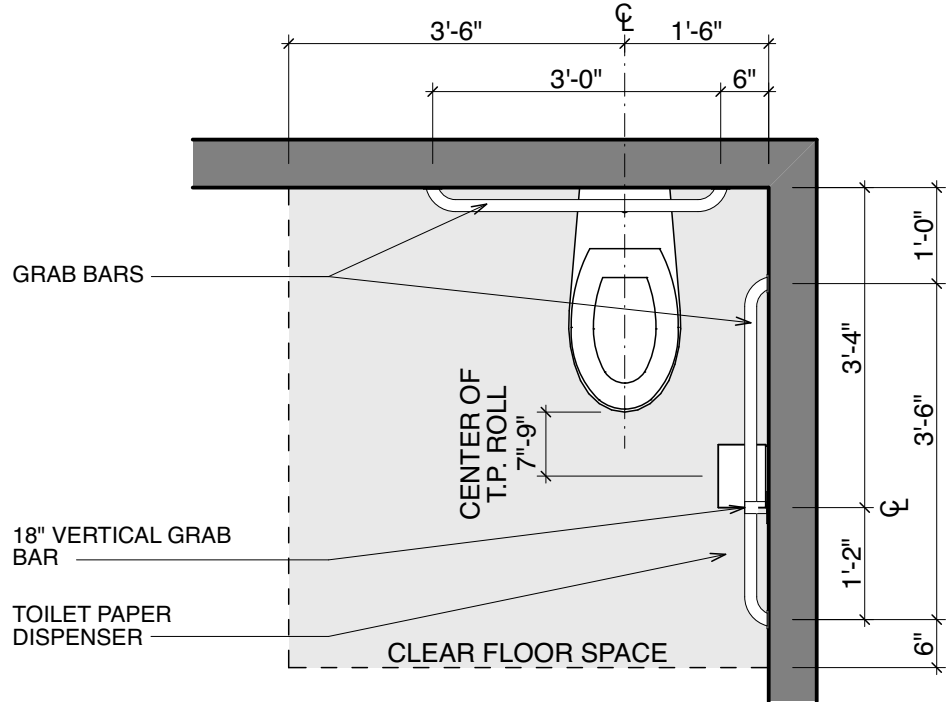
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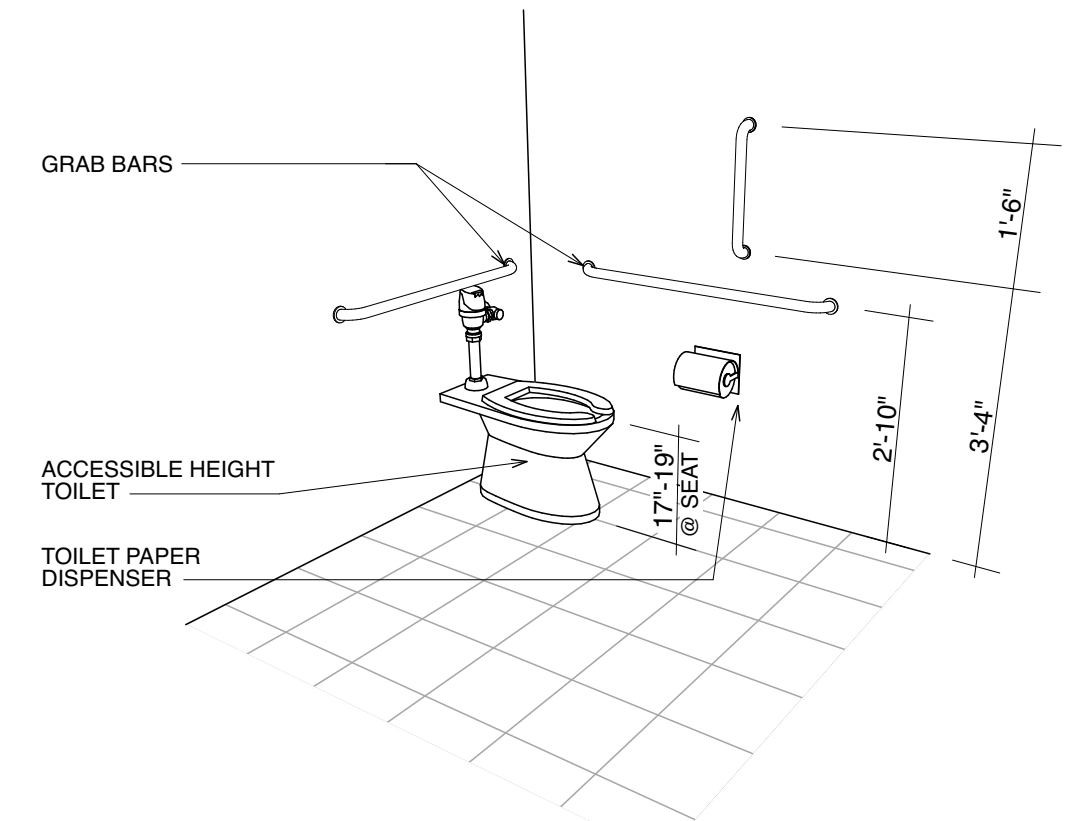




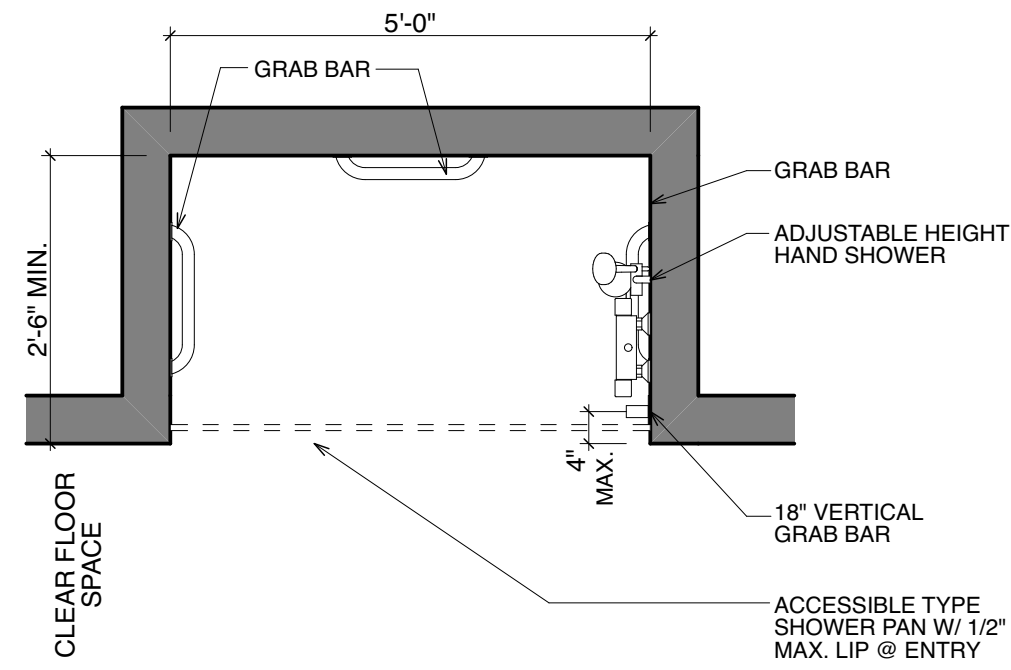
WALLS AND INTERIOR PARTITIONS, WOOD FRAMED			
GA FILE NO. WP 3241	PROPRIETARY†	1 HOUR FIRE	50 to 54 STC SOUND
<b>GYPSUM WALLBOARD, RESILIENT CHANNELS, MINERAL FIBER INSULATION, WOOD STUDS</b>			
Resilient channels 24" o.c. attached at right angles to ONE SIDE of 2 x 4 wood studs 16" or 24" o.c. with 1 1/4" Type S drywall screws. One layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied parallel to channels with 1" Type S drywall screws 12" o.c. End joints backblocked with resilient channels. 3" mineral fiber insulation, 2.0 or 2.3 pcf, in stud space.			
OPPOSITE SIDE: one layer 5/8" proprietary type X gypsum wallboard or gypsum veneer base applied at right angles to studs with 1 1/4" Type W drywall screws 12" o.c.			
Vertical joints staggered 48" on opposite sides. Sound tested with studs 16" o.c. and open face of mineral fiber insulation blankets toward resilient channel-side of stud space. (LOAD-BEARING)			
<b>PROPRIETARY GYPSUM BOARD</b>			
American Gypsum Company 5/8" FIREBLOC TYPE C CertainTeed Gypsum, Inc. 5/8" ProRock Type C Gypsum Panels G-P Gypsum 5/8" ToughRock® Fireguard® C Lafarge North America Inc. 5/8" Firecheck® Type C National Gypsum Company 5/8" Gold Bond® Brand FIRE-SHIELD CW Gypsum Wallboard PABCO Gypsum 1/2" FLAME CURB® Super C® Temple-Inland Forest Products Corporation 5/8" TG-C			
†Contact the manufacturer for more detailed information on proprietary products.			
FLOOR-CEILING SYSTEMS, WOOD FRAMED			
GA FILE NO. FC 5111	GENERIC	1 HOUR FIRE	50 to 54 STC SOUND
<b>WOOD I-JOISTS, GYPSUM WALLBOARD, RESILIENT CHANNELS</b>			
Base layer 1/2" type X gypsum wallboard applied at right angles to resilient channels 16" o.c. with 1 1/4" Type S drywall screws 12" o.c. Resilient channels applied at right angles to minimum 9 1/2" deep wood I-joists, with minimum 1 1/4" deep x 1 1/2" wide flanges and minimum 3/4" webs, 24" o.c. with 1 1/4" Type W drywall screws. Face layer 1/2" type X gypsum wallboard applied at right angles to channels with 1 1/2" Type S drywall screws 12" o.c. Face layer end joints located midway between channels and attached to base layer with 1 1/2" Type G screws 12" o.c. Edge joints offset 24" from base layer edge joints. Wood I-joists supporting 3/4" oriented strand board applied at right angles to I-joists with 8d common nails 12" o.c.			
STC and IIC tested with 40 oz carpet over 1/4" foam pad.			
ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.			



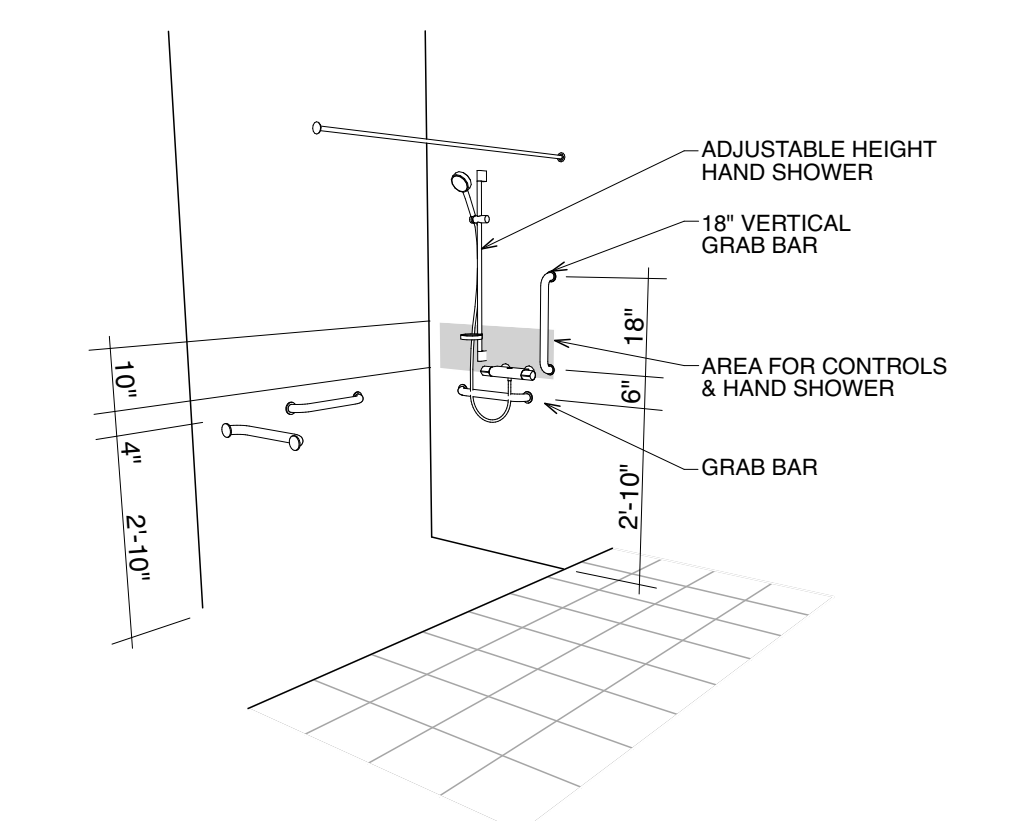
1 TYPICAL ACCESSIBLE TOILET  
SCALE: 1/2" = 1'-0"



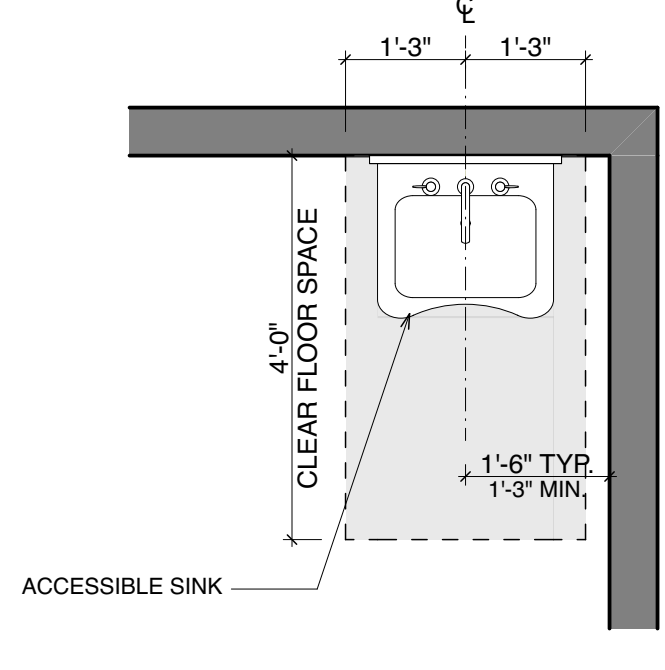
4 TYPICAL ACCESSIBLE TOILET  
SCALE: 3/8" = 1'-0"



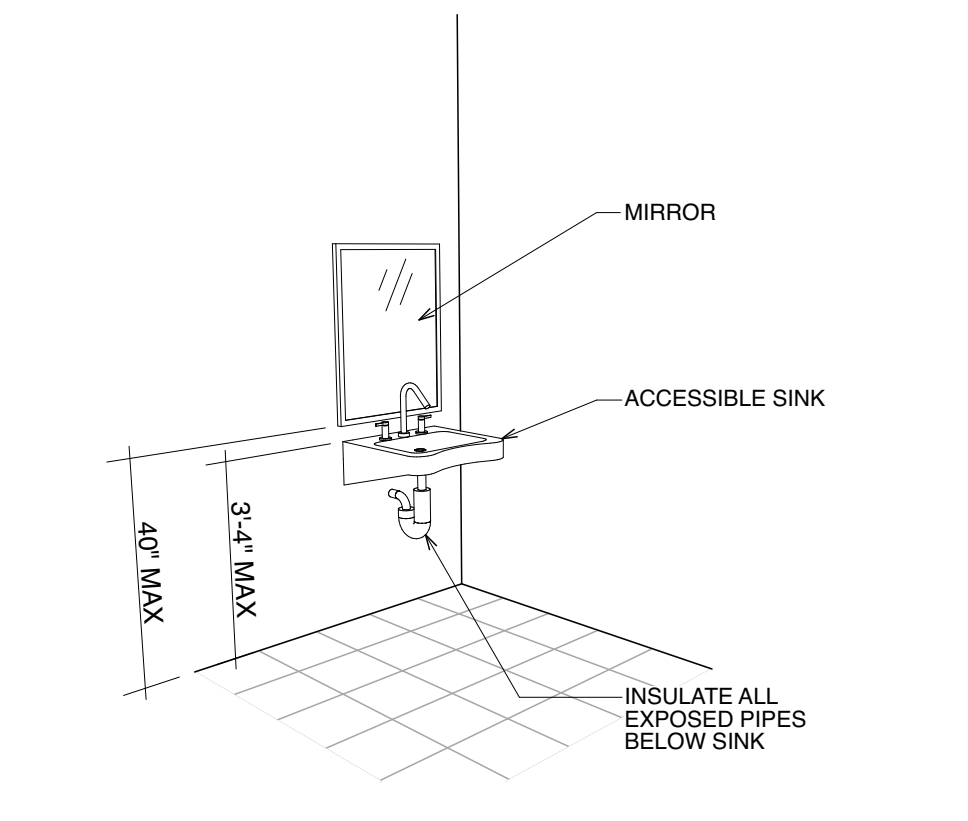
2 ROLL-IN TYPE SHOWER  
SCALE: 1/2" = 1'-0"



5 ROLL-IN TYPE SHOWER  
SCALE: 1/16" = 1'-0"

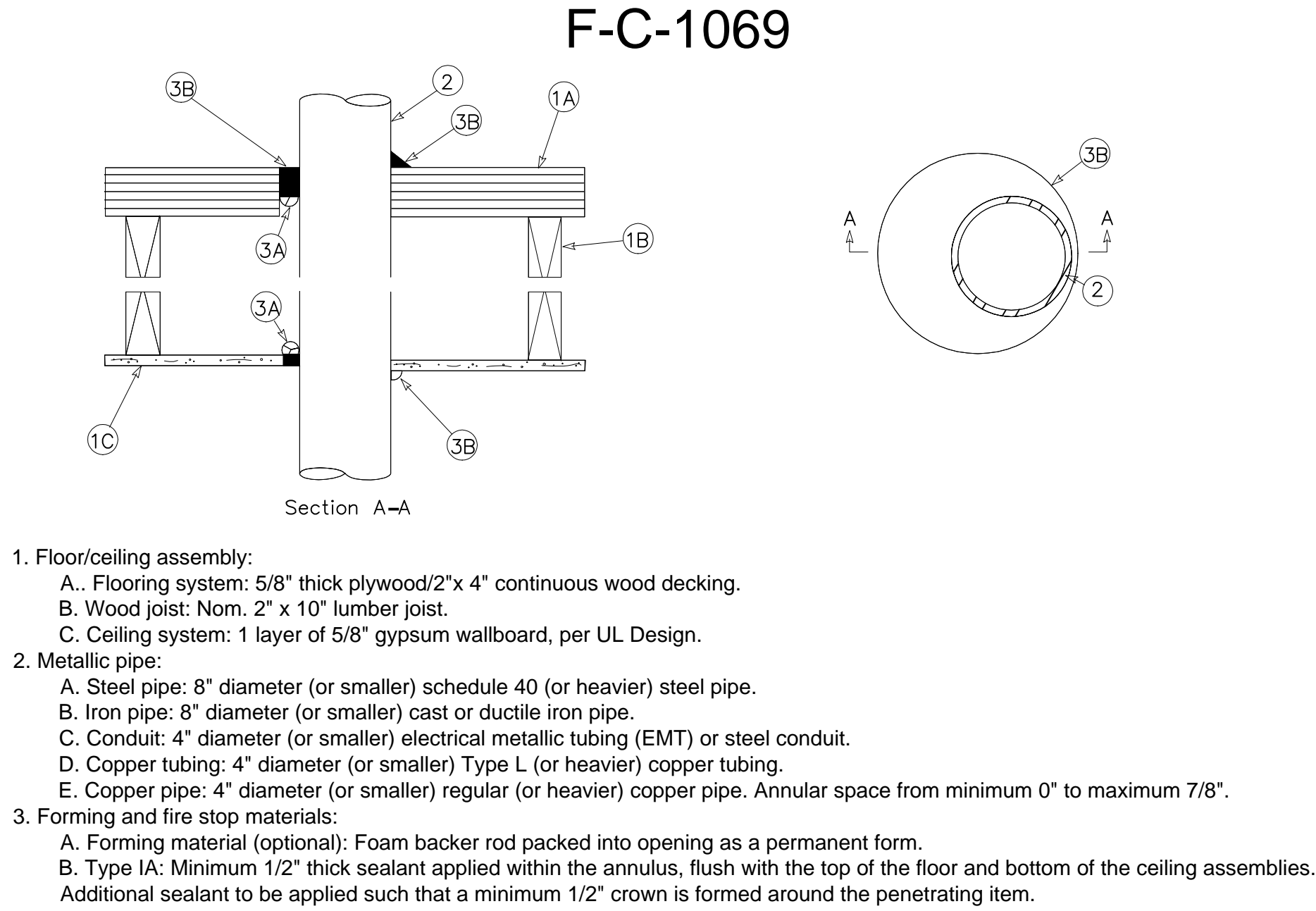


3 WALL MOUNT LAVATORY  
SCALE: 1/2" = 1'-0"

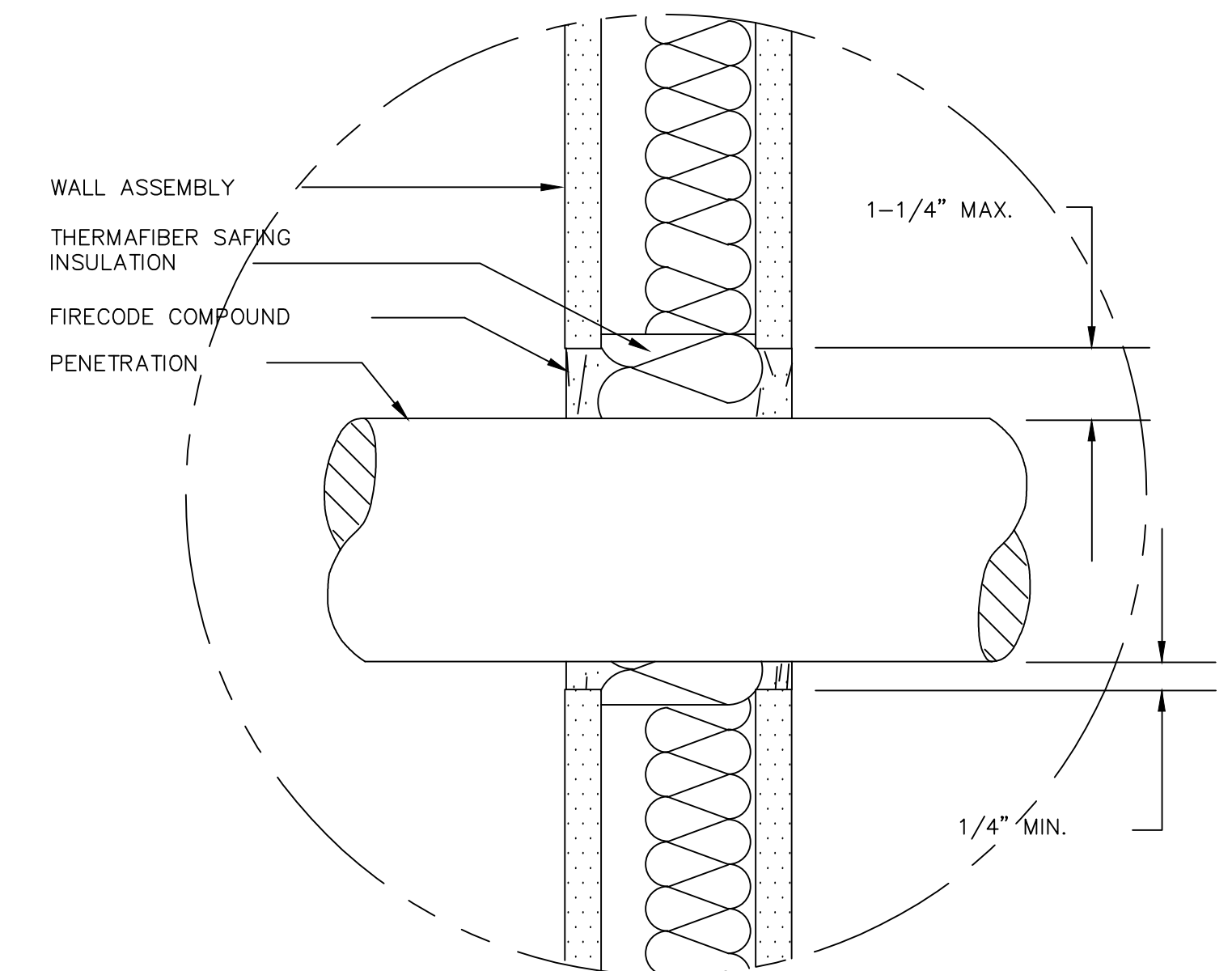


6 WALL MOUNT LAVATORY  
SCALE: 1/16" = 1'-0"

EXTERIOR WALL			
GA FILE NO. WP 8415	GENERIC	2 HOUR FIRE	
<b>GYPSUM SHEATHING, GYPSUM WALLBOARD, WOOD STUDS</b>			
EXTERIOR SIDE: Base layer 3/4" type X gypsum sheathing applied parallel or at right angles to 2 x 4 wood studs 24" o.c. with 6d coated nails, 1 1/4" long, 0.085" shank, 1/4" heads, 24" o.c. Face layer 3/4" type X gypsum sheathing applied parallel or at right angles to studs with 8d coated nails, 2 1/4" long, 0.100" shank, 1/4" heads, 8" o.c. Exterior cladding attached through sheathing to studs.			
INTERIOR SIDE: Base layer 3/4" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 6d coated nails, 1 1/4" long, 0.085" shank, 1/4" heads, 24" o.c. Face layer 3/4" type X gypsum wallboard or gypsum veneer base applied parallel or at right angles to studs with 8d coated nails, 2 1/4" long, 0.100" shank, 1/4" heads, 8" o.c.			
Joints staggered 24" each layer and side. (LOAD-BEARING)			
ADD MINIMUM R-15 INSULATION IN CAVITIES BETWEEN STUDS.			
WALLS AND INTERIOR PARTITIONS, WOOD-FRAMED			
GA FILE NO. WP 4135	GENERIC	2 HOUR FIRE	40 to 44 STC SOUND
<b>GYPSUM WALLBOARD, WOOD STUDS</b>			
Base layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side of 2 x 4 wood studs 24" o.c. with 6d coated nails, 1 7/8" long, 0.085" shank, 1/4" heads, 24" o.c. Face layer 5/8" type X gypsum wallboard or gypsum veneer base applied at right angles to each side with 8d coated nails, 2 3/8" long, 0.100" shank, 1/4" heads, 8" o.c.			
Joints staggered 24" each layer and side. Sound tested with studs 16" o.c. and with nails for base layer spaced 6" o.c. (LOAD-BEARING)			
ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.			
Thickness: 6 1/8" Approx. Weight: 12 psf Fire Test: FM WP 360, 9-27-74 Sound Test: NGC 2363, 4-1-70			
FLOOR-CEILING SYSTEMS, WOOD FRAMED			
GA FILE NO. FC 5750	GENERIC	2 HOUR FIRE	
<b>WOOD FLOOR, WOOD I-JOISTS, GYPSUM WALLBOARD, RIGID FURRING CHANNELS</b>			
Base layer 3/4" type X gypsum wallboard applied at right angles to 9 1/2" deep wood I-joists 24" o.c. with 1 1/4" Type W drywall screws 12" o.c. Second layer 3/4" type X gypsum wallboard applied at right angles to I-joists with 2" Type W drywall screws 12" o.c. Second layer joints offset 24" from base layer joints. Third layer 3/4" type X gypsum wallboard applied at right angles to I-joists with 2 1/2" Type W drywall screws 12" o.c. Third layer joints offset 12" from second layer joints. Hat-shaped rigid furring channels 24" o.c. applied at right angles to I-joists over third layer with two 2 1/2" long Type W drywall screws at each I-joint. Face layer 3/4" type X gypsum wallboard applied at right angles to furring channels with 1 1/4" Type S drywall screws 12" o.c. Wood I-joists supporting 3/4" T & G edge plywood floor applied at right angles to I-joists with 8d nails 6" o.c. at joints and 12" at intermediate I-joists. Ceiling provides two-hour fire-resistance protection for wood framing.			
ADD 3" MINERAL FIBER SOUND ATTENUATING INSULATION OVER RESILIENT CHANNELS BETWEEN JOISTS.			
STRUCTURAL DISCLAIMER - JOIST SIZE IS REFERENCED MINIMUM FOR FIRE RATING. STRUCTURAL DETERMINATION BY OTHERS			



- Floor/ceiling assembly:
  - Flooring system: 5/8" thick plywood/2"x 4" continuous wood decking.
  - Wood joist: Nom. 2" x 10" lumber joist.
  - Ceiling system: 1 layer of 5/8" gypsum wallboard, per UL Design.
- Metallic pipe:
  - Steel pipe: 8" diameter (or smaller) schedule 40 (or heavier) steel pipe.
  - Iron pipe: 8" diameter (or smaller) cast or ductile iron pipe.
  - Conduit: 4" diameter (or smaller) electrical metallic tubing (EMT) or steel conduit.
  - Copper tubing: 4" diameter (or smaller) Type L (or heavier) copper tubing.
  - Copper pipe: 4" diameter (or smaller) regular (or heavier) copper pipe. Annular space from minimum 0" to maximum 7/8".
- Forming and fire stop materials:
  - Forming material (optional): Foam backer rod packed into opening as a permanent form.
  - Type IA: Minimum 1/2" thick sealant applied within the annulus, flush with the top of the floor and bottom of the ceiling assemblies. Additional sealant to be applied such that a minimum 1/2" crown is formed around the penetrating item.



WALL ASSEMBLY  
UL SYSTEM NO. 605  
SCALE: HALF DATE: 1/27/94  
UNITED STATES GYPSUM COMPANY  
use only the proper fire-resistance rating for the  
use only the proper fire-resistance rating for the  
use only the proper fire-resistance rating for the  
use only the proper fire-resistance rating for the



Wall Bracing Simplified

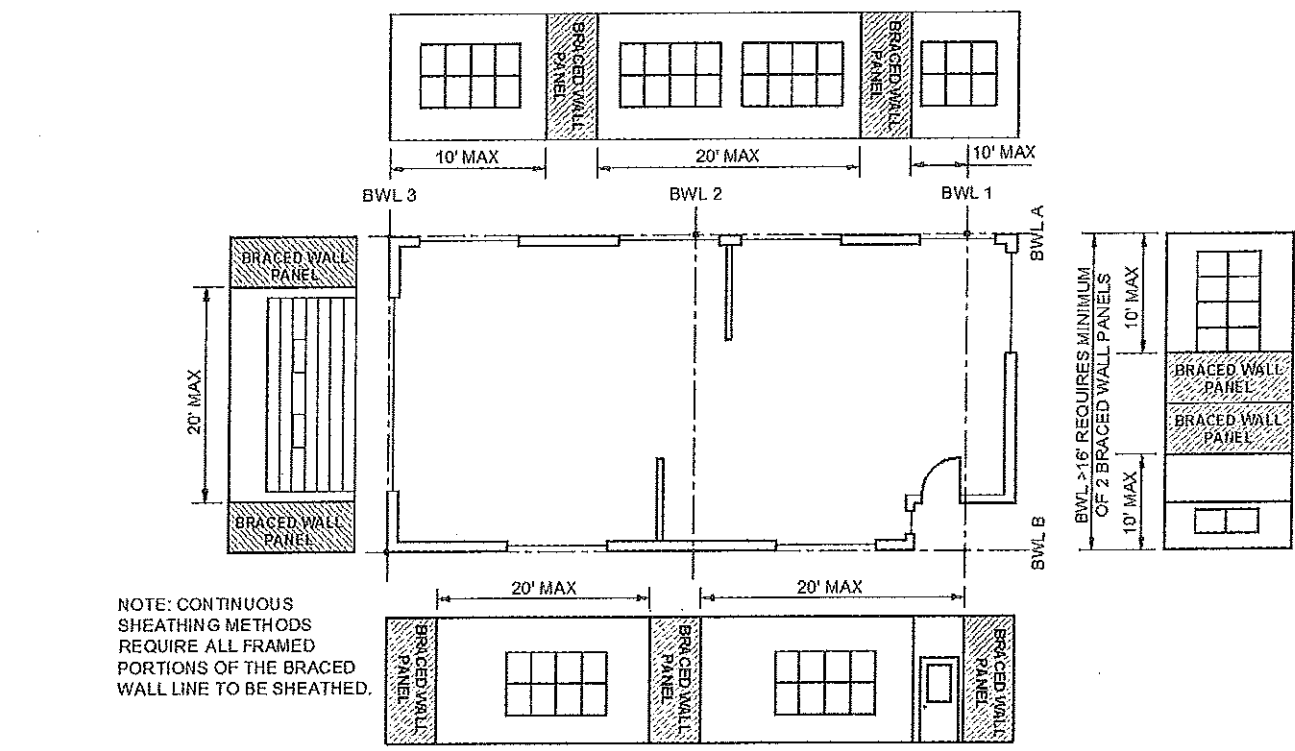
The following options are for narrow wall bracing adjacent to door / window openings and when a 4' braced panel cannot be achieved within 10' of building corners and every 20' of wall length:

Option #1:

Continuous sheathed method (CS-G) R603.10.4:

- 8' plate = 24" wide braced wall panel
- 9' plate = 27" wide braced wall panel
- 10' plate = 30" wide braced wall panel
- 10' plate = 33" wide braced wall panel
- 12' plate = 36" wide braced wall panel

WALL CONSTRUCTION



For ST: 1 foot = 304.8 mm.

FIGURE R602.10.2.2  
LOCATION OF BRACED WALL PANELS

Wall Bracing Simplified

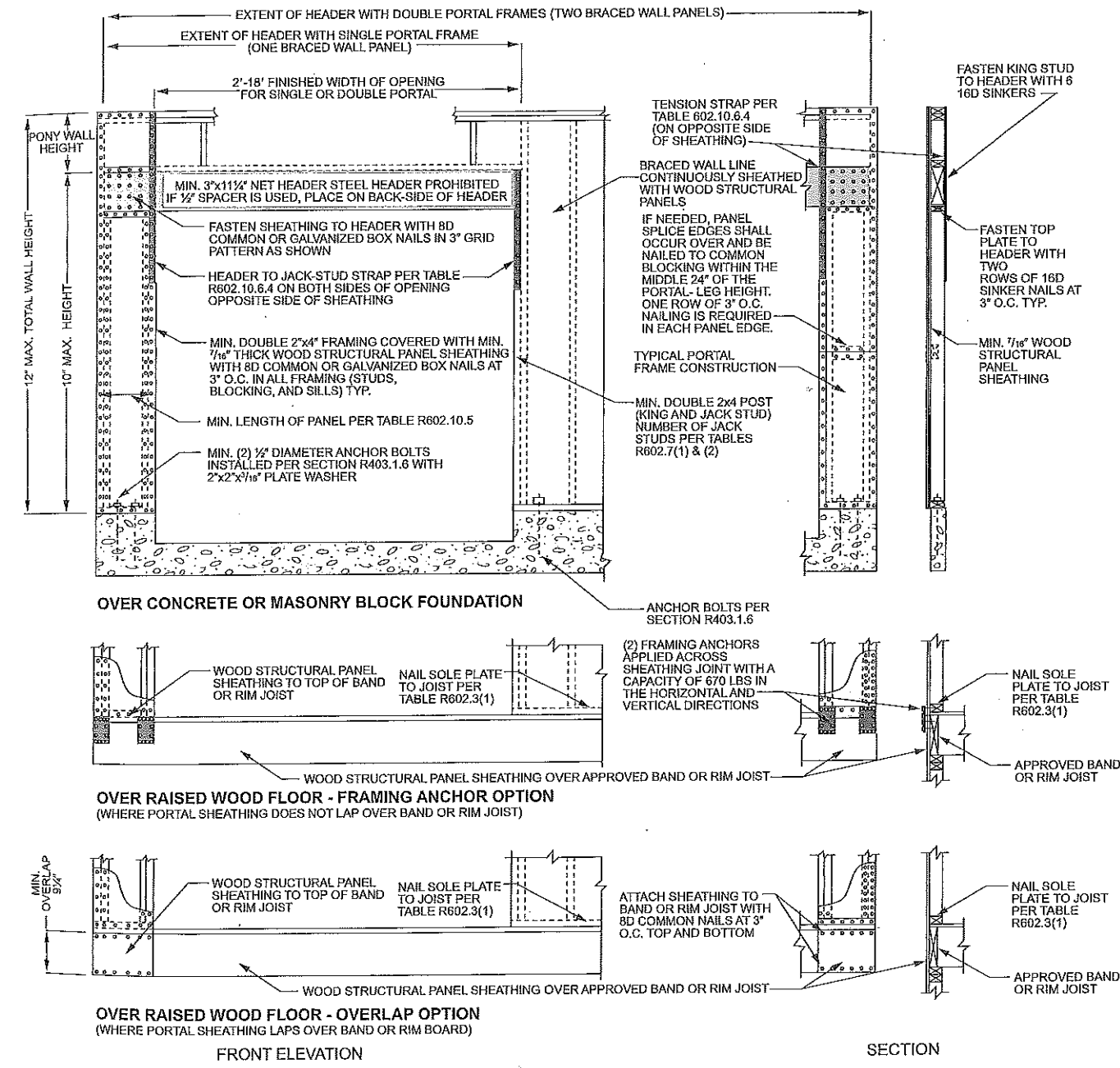
Option # 5

Continuous Sheathed Portal Frame (CS-PF), R602.10.6.4

- 8' plate = 16" wide braced wall panel
- 9' plate = 18" wide braced wall panel
- 10' plate = 20" wide braced wall panel
- 11' plate = 22" wide braced wall panel
- 12' plate = 24" wide braced wall panel

\*Special straps required per Figure R602.10.6.4

\*Braced wall panels within 10' of corners and every 20' on wall length



For ST: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

Wall Bracing Simplified

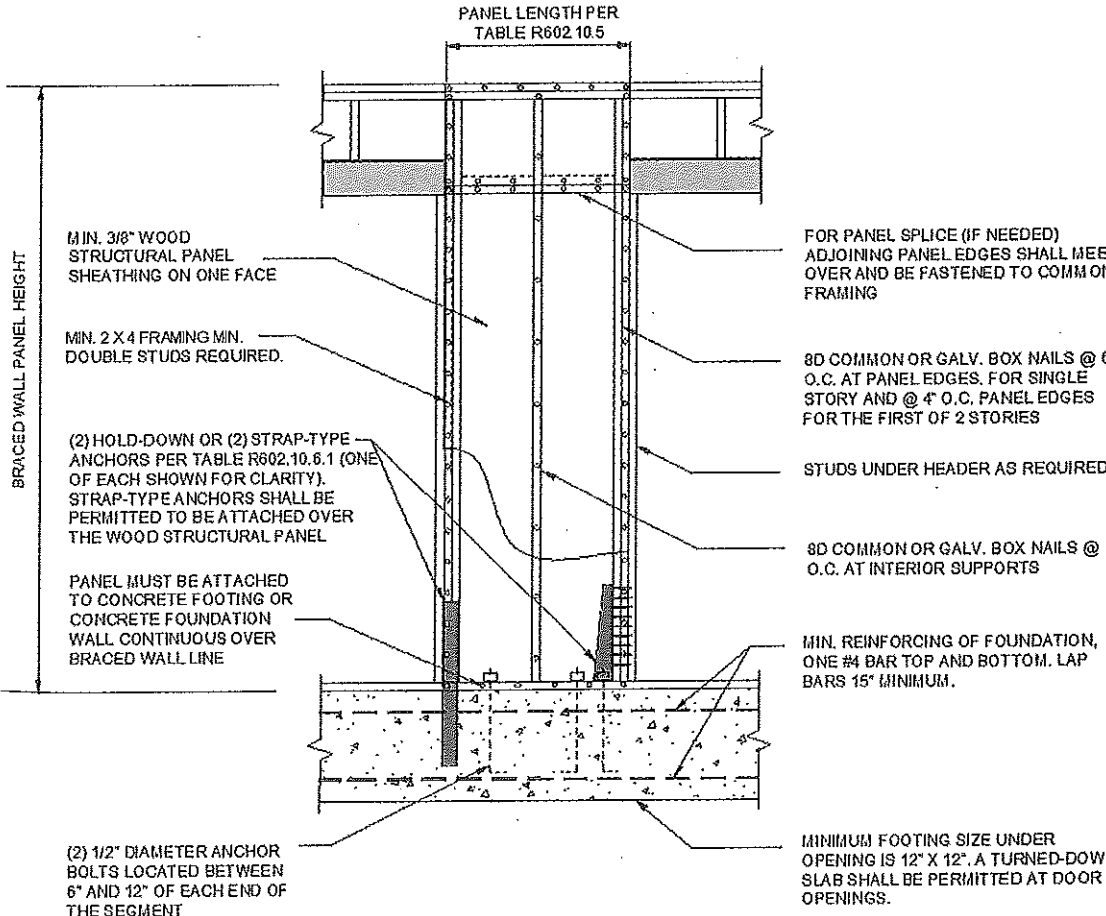
Option #2:

Alternate Braced Wall Panel (ABW) 602.10.6.1:

- 8' plate = 28" wide braced wall panel
- 9' plate = 32" wide braced wall panel
- 10' plate = 34" wide braced wall panel
- 12' plate = 42" wide braced wall panel

\*Special straps required per Figure R602.10.6.1

\*Braced wall panels within 10' of corners and every 20' on wall length



For ST: 1 inch = 25.4 mm.

FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL

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Wall Bracing Simplified

Option #3:

Portal Frame with Hold-Downs (PFH), R602.10.6.2:

Supporting roof only:

- 8' plate = 16" wide braced wall panel
- 9' plate = 16" wide braced wall panel
- 10' plate = 16" wide braced wall panel
- 11' plate = 18" wide braced wall panel
- 12' plate = 20" wide braced wall panel

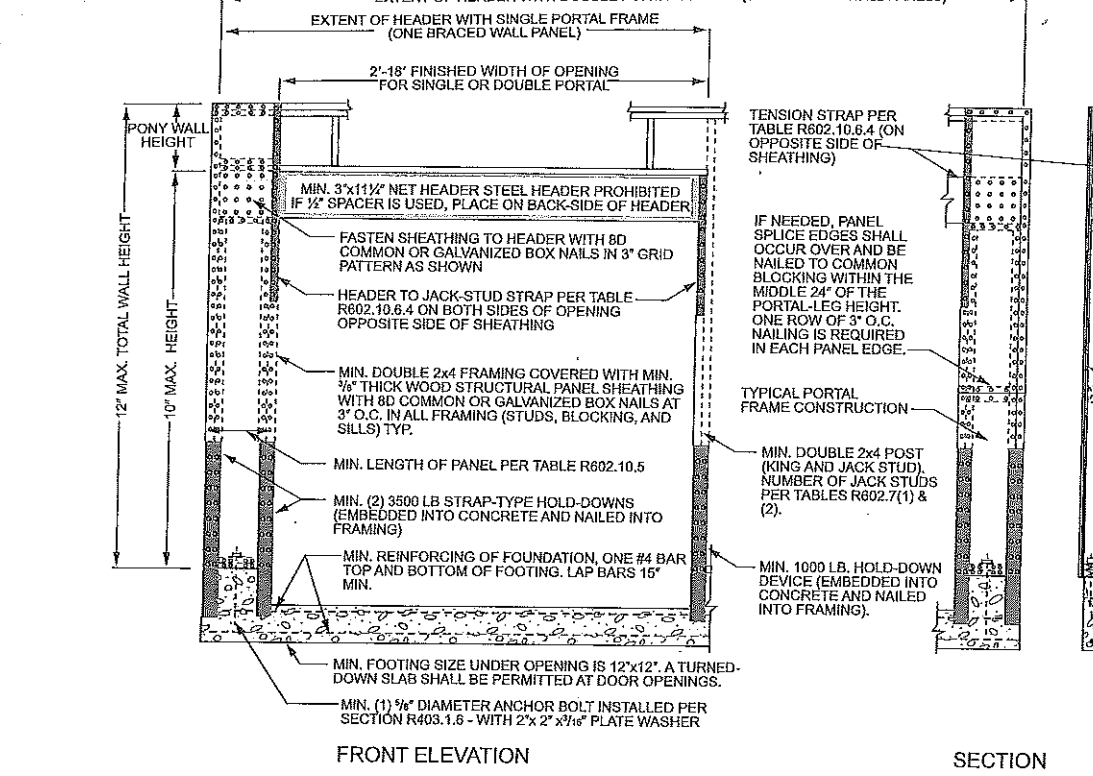
Two story:

- 8' plate = 24" wide braced wall panel
- 9' plate = 24" wide braced wall panel
- 10' plate = 24" wide braced wall panel
- 11' plate = 27" wide braced wall panel
- 12' plate = 29" wide braced wall panel

\*Special straps required per Figure R602.10.6.2

\*Braced wall panels within 10' of corners and every 20' on wall length

WALL CONSTRUCTION



For ST: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

Wall Bracing Simplified

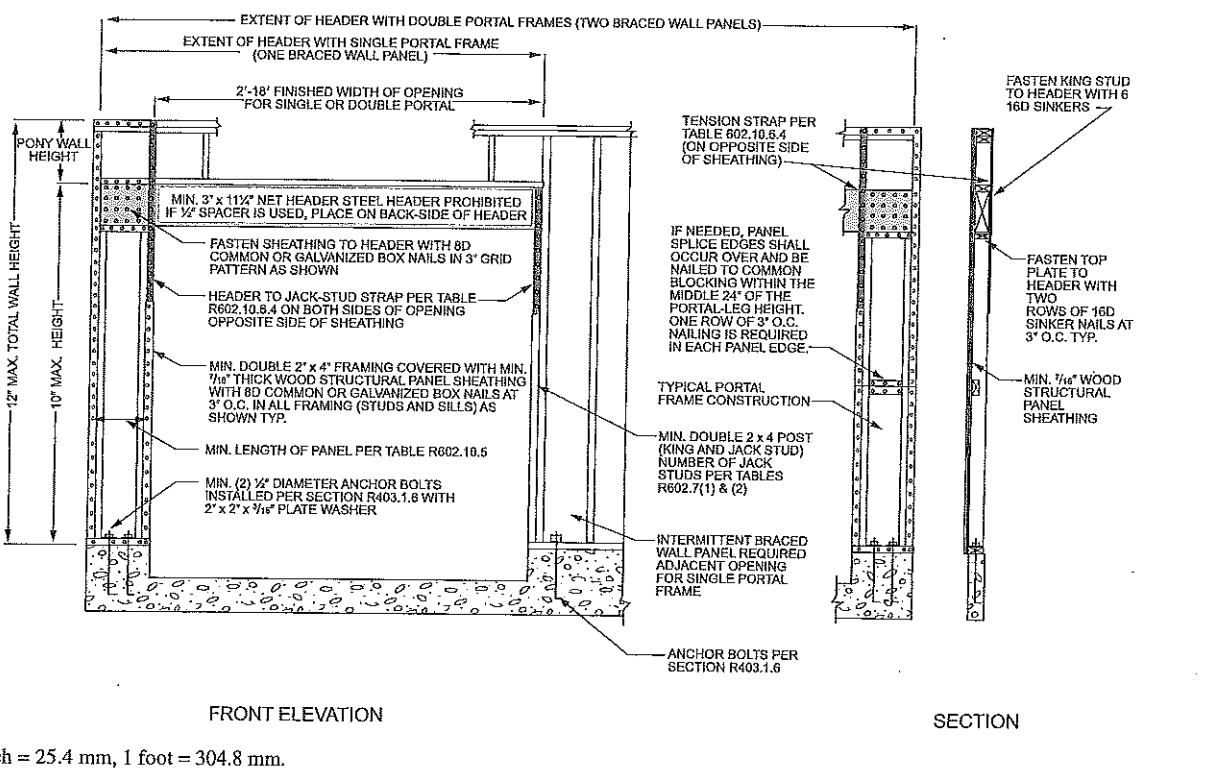
Option #4:

Portal Frame at Garage Opening (PFG), R602.10.6.3

- 8' plate = 24" wide braced wall panel
- 9' plate = 27" wide braced wall panel
- 10' plate = 30" wide braced wall panel
- 11' plate = 33" wide braced wall panel
- 12' plate = 36" wide braced wall panel

\*Special straps required per Figure R602.10.6.3

\*Braced wall panels within 10' of corners and every 20' on wall length

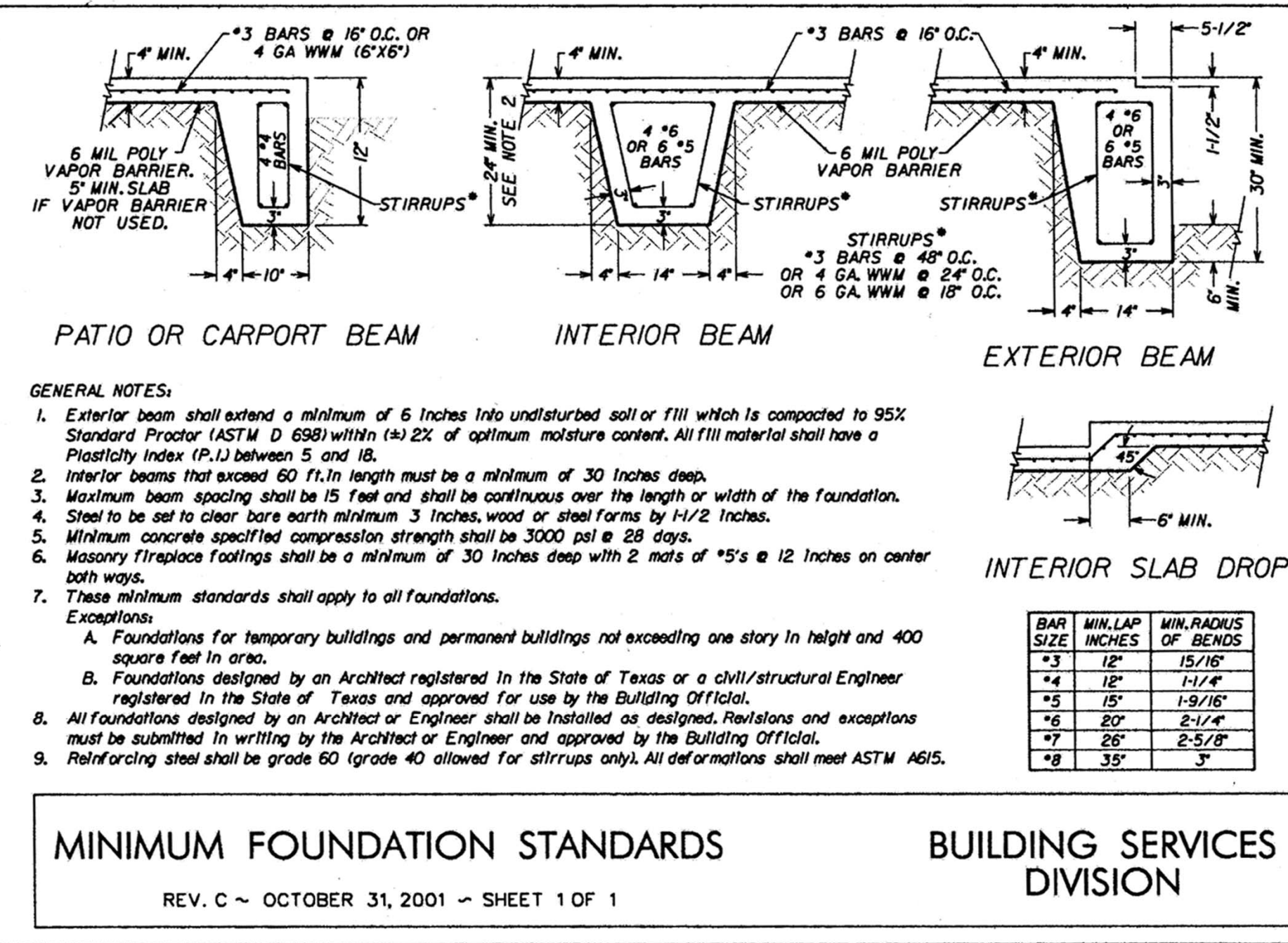


For ST: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.3  
METHOD PFG—PORTAL FRAME AT GARAGE DOOR OPENINGS IN SEISMIC DESIGN CATEGORIES A, B AND C

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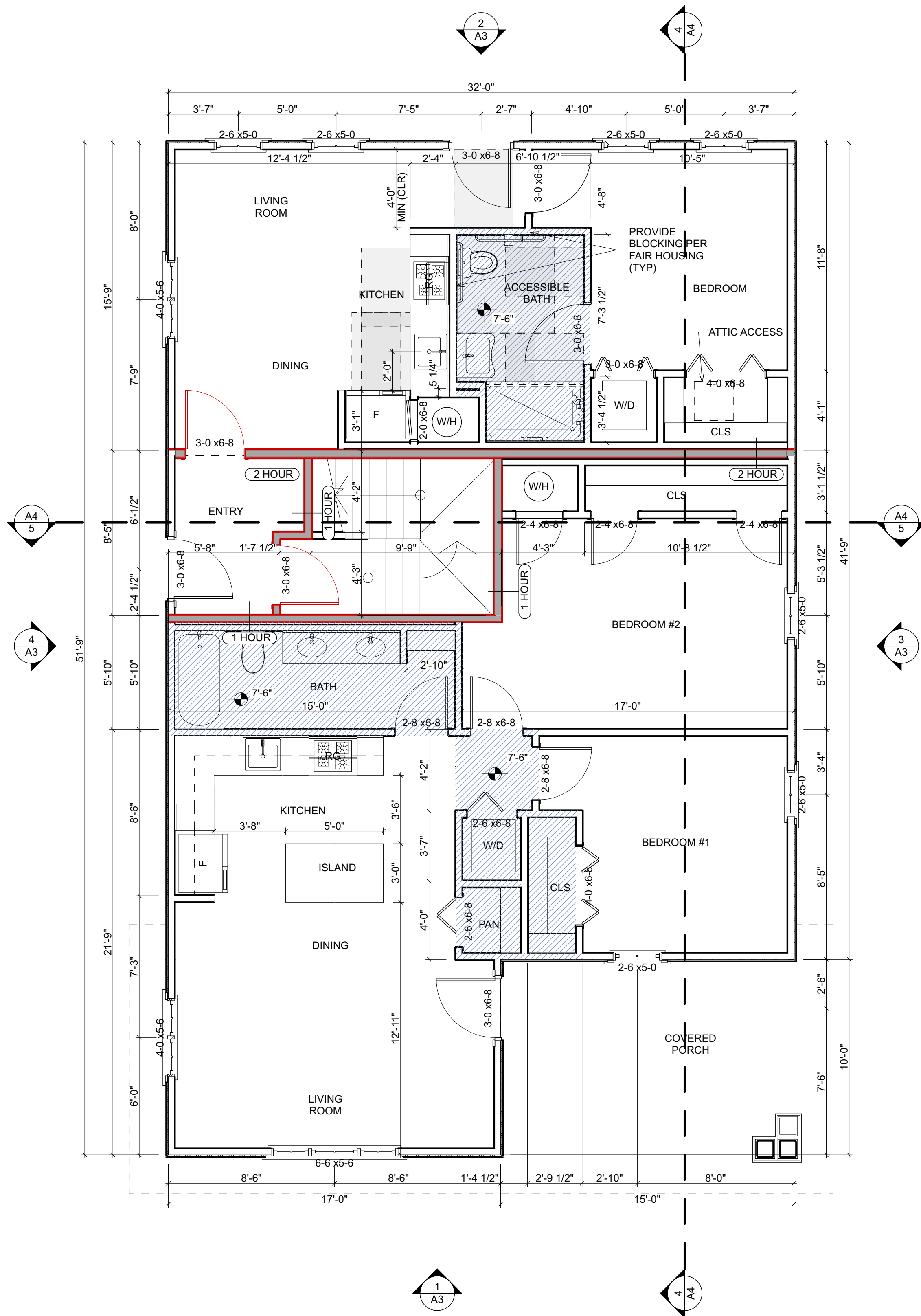


MINIMUM FOUNDATION STANDARDS

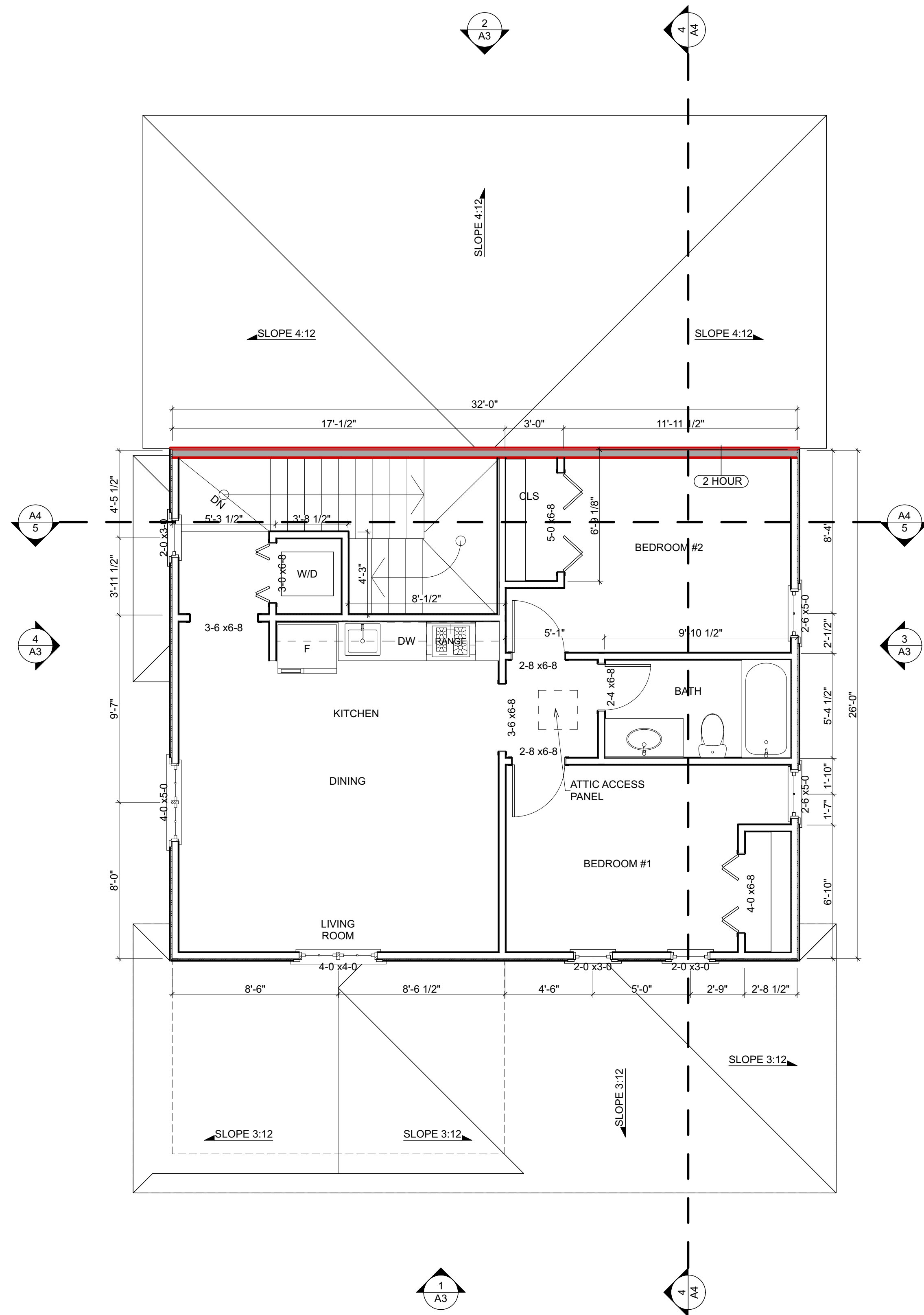
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BUILDING SERVICES  
DIVISION





1 FIRST FLOOR PLAN  
SCALE: 1/4" = 1'-0"



2 SECOND FLOOR PLAN  
SCALE: 1/4" = 1'-0"

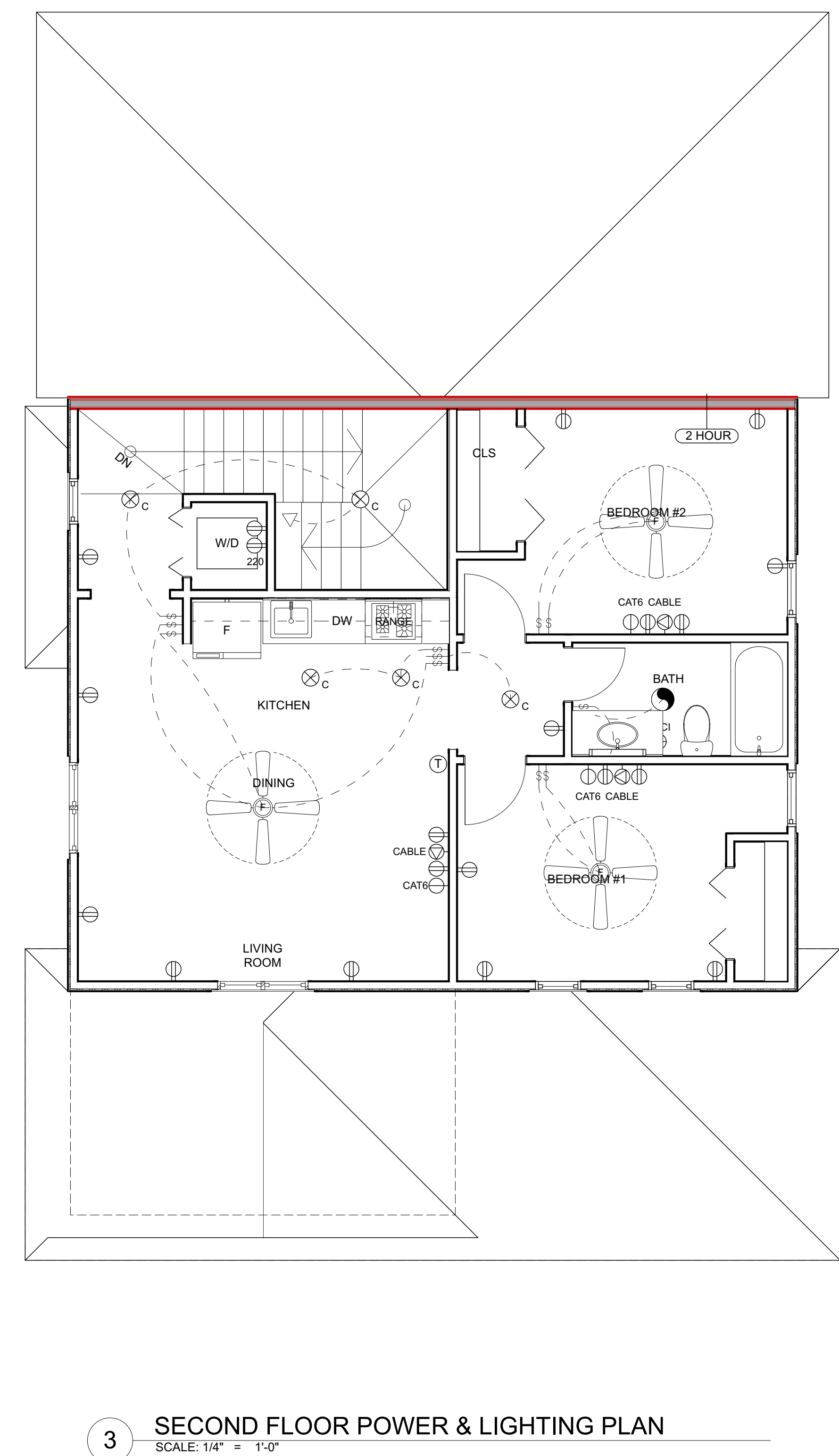
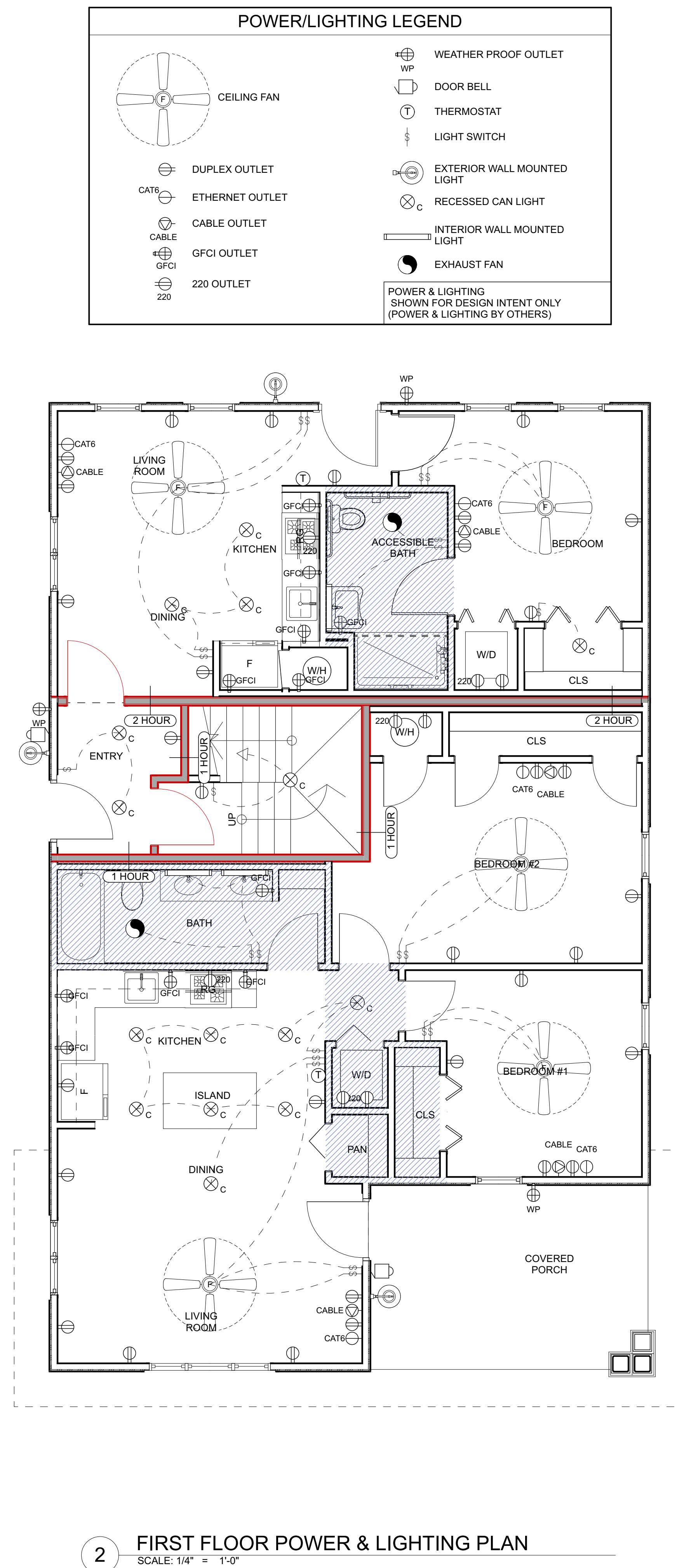
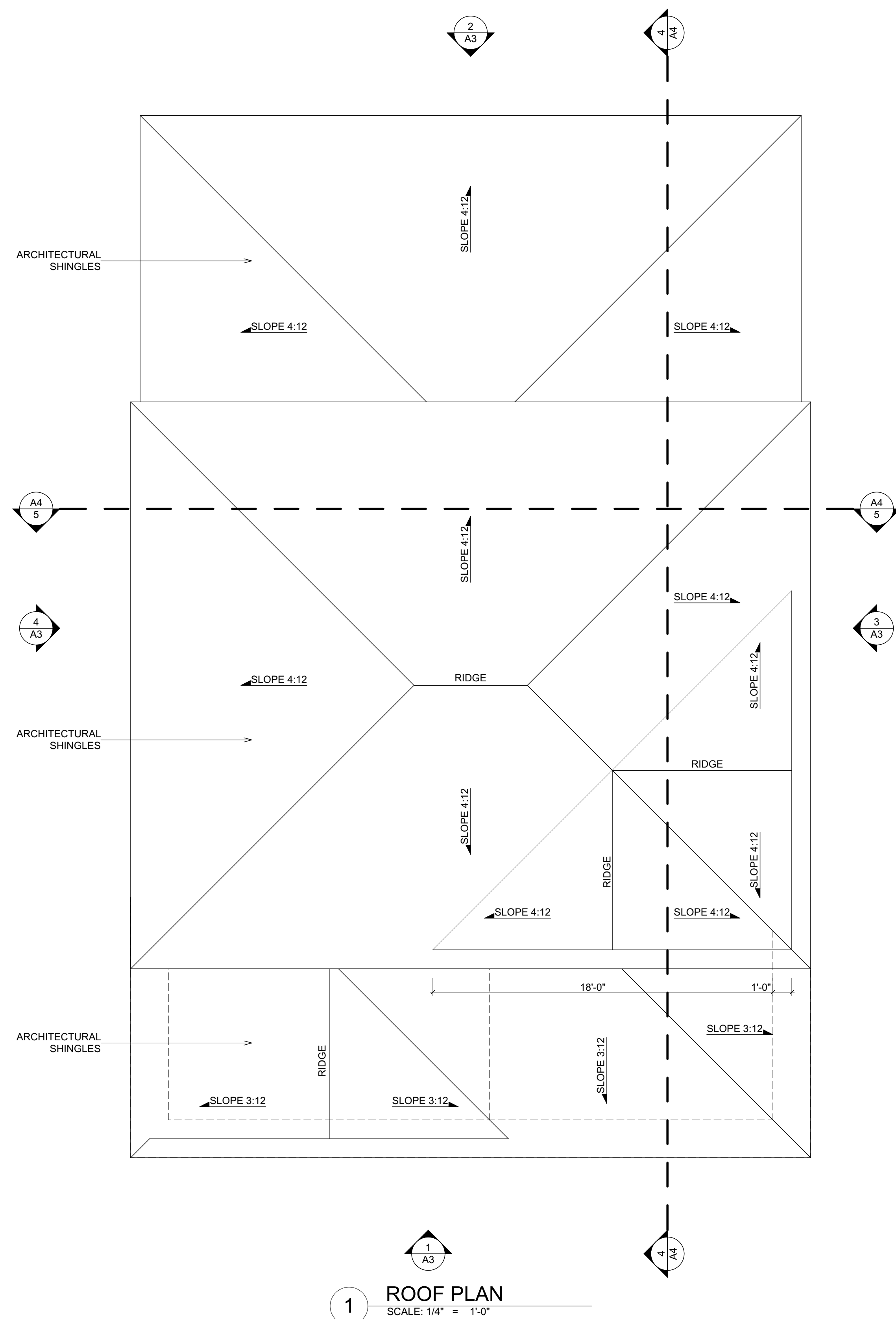
**FLOOR PLAN LEGEND**

- SHADED WALLS INDICATE FIRE RATED WALL CONSTRUCTION TO SEPARATE UNITS. SEE WALL TAG ON FLOOR PLAN FOR NUMBER OF HOURS WALL IS REQUIRED TO BE RATED FOR. SEE SHEET A0 FOR DETAILS ON RATED ASSEMBLY.
- SHADED FLOOR AREA INDICATES 2 HOUR FIRE RATED FLOOR CONSTRUCTION TO SEPARATE UNITS. SEE SHEET A0 FOR DETAILS ON RATED ASSEMBLY.
- SHADED FLOOR AREA INDICATES AREAS WITH EITHER A DROPPED CEILING OR A SOFFIT FRAMED AT 7'-6" ABOVE FINISH FLOOR TO ACCOMMODATE AN ABOVE CEILING H.V.A.C. UNIT & DUCTWORK TO SERVE ADJACENT ROOMS.

**GENERAL NOTES**

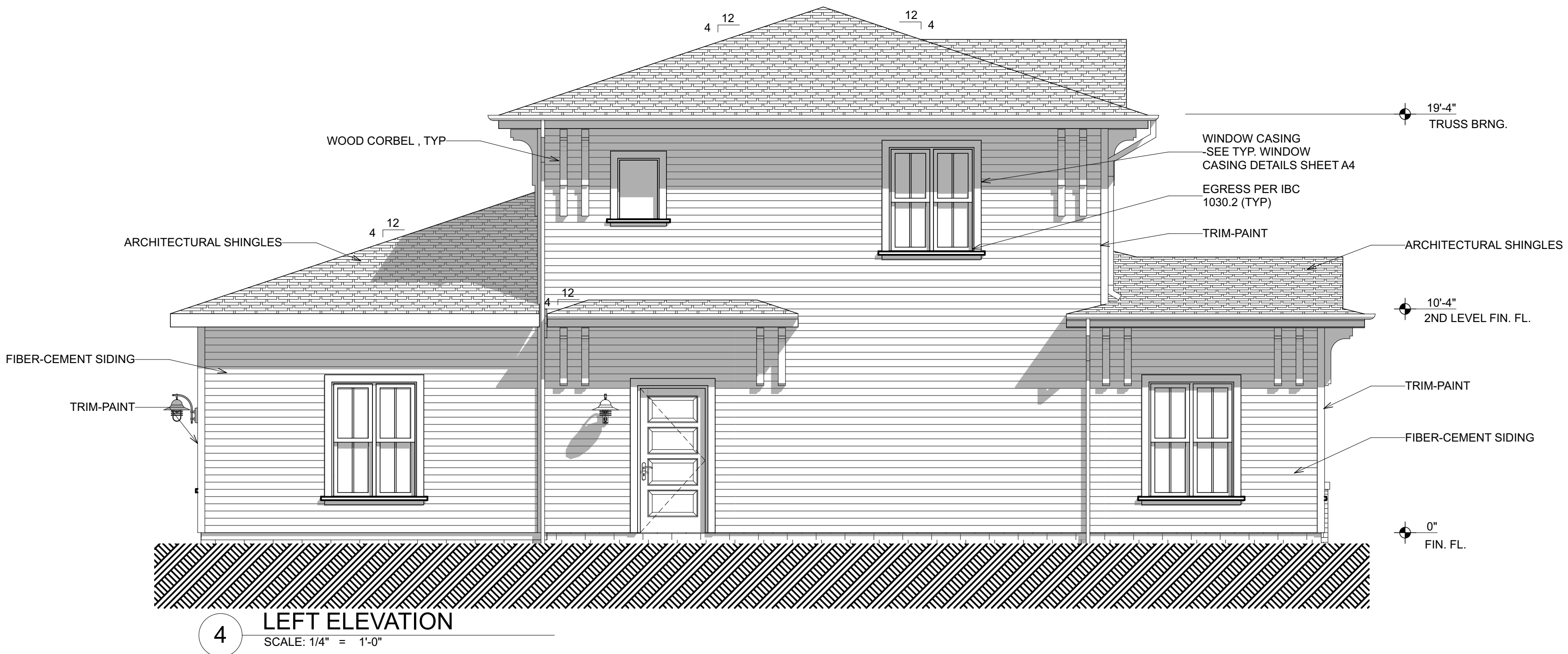
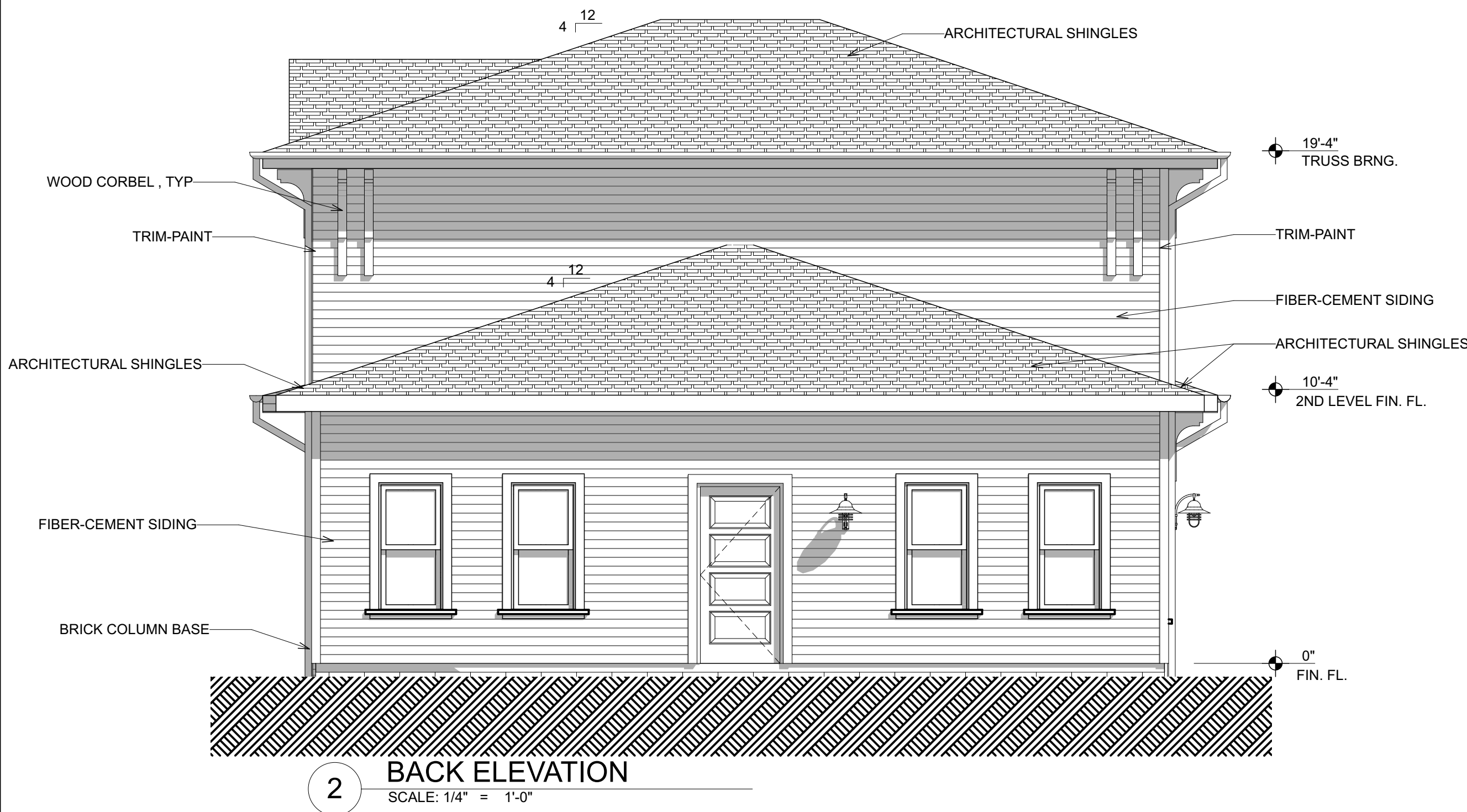
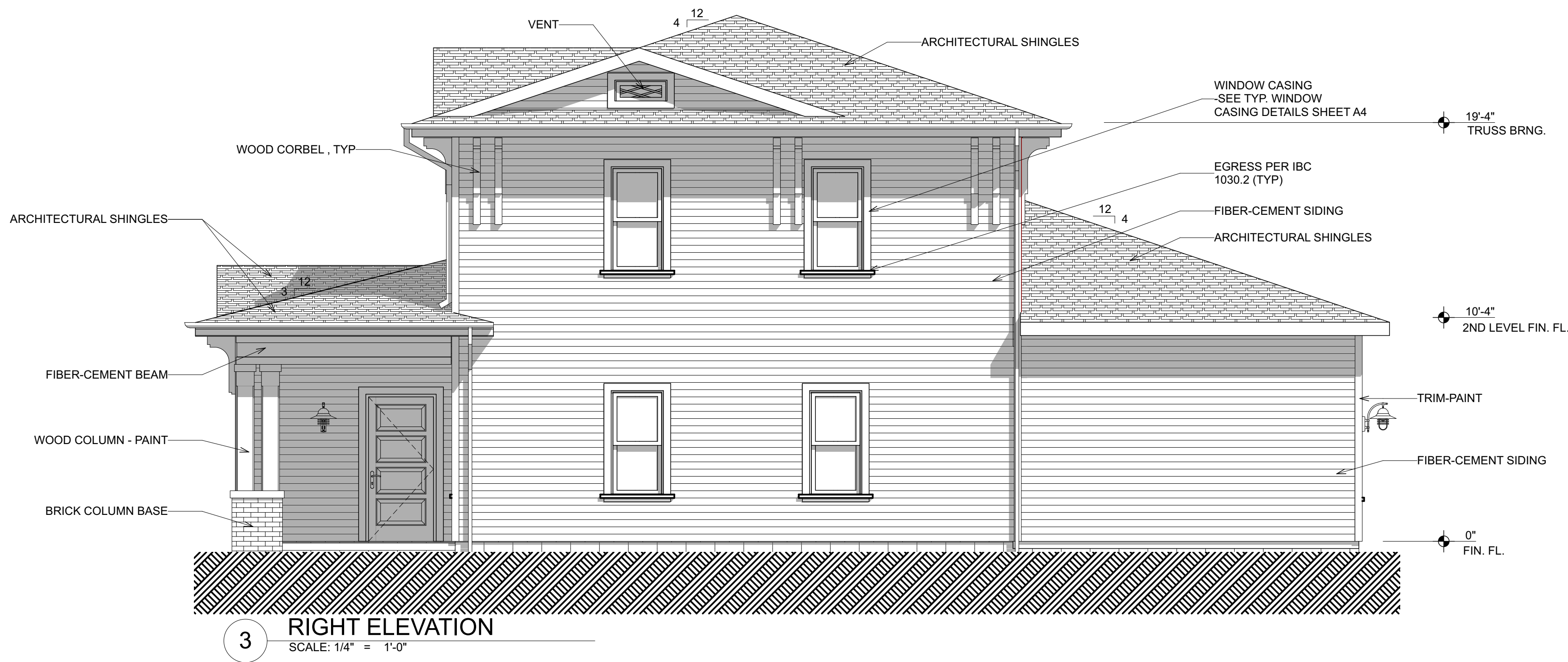
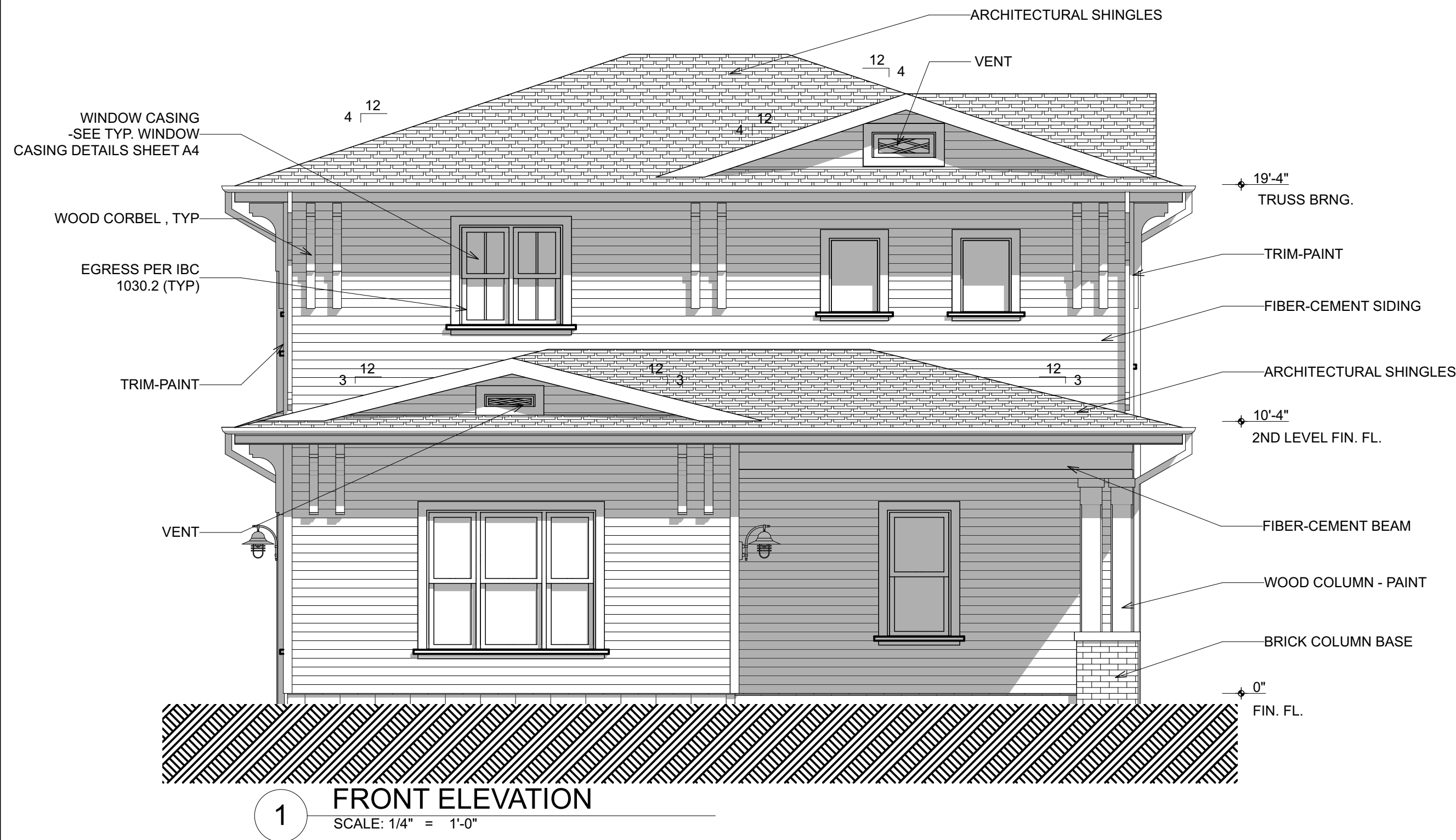
- LOCATE AND MARK ALL UTILITY, SERVICE AND SYSTEMS LOCATIONS PRIOR TO COMMENCEMENT OF WORK. FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITY COMPONENTS.
- DIMENSIONS ARE SHOWN TO BE FACE OF NOMINAL STUDS, MASONRY VENEER AND TO THE CENTERLINES OF DOORS, WINDOWS AND COLUMNS. (UNLESS NOTED OTHERWISE)
- PROVIDE WOOD BLOCKING IN WALLS AS REQUIRED TO INSTALL CABINETS, HANDRAILS, TOILET ACCESSORIES, ADA ACCESSIBLE ACCESSORIES PER FAIR HOUSING REQUIREMENTS, ETC.
- FINISH MATERIALS ARE TO BE INSTALLED BEHIND AND BENEATH APPLIANCES, KNEE SPACES, MOVE-ABLE EQUIPMENT, ETC...
- COORDINATE EQUIPMENT ROUGH OPENING SIZES AND LOCATIONS WITH THE RESPECTIVE EQUIPMENT.
- INSTALL INTERIOR DOORS SUCH THAT THERE IS A 4" CLEAR ON THE HINGE SIDE OF THE DOOR TO ADJACENT FINISHED WALL SURFACE (UNLESS NOTED OTHERWISE).
- NOTE: BUILDINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TEXAS ACCESSIBILITY STANDARDS AND COANSI A 117.1. GROUND FLOOR DWELLING UNITS TO COMPLY WITH FAIR HOUSING (FH) REQUIREMENTS, NOTE THAT FH REQUIREMENTS VARY DEPENDING ON THE NUMBERS OF UNITS PER SITE WITH MULTIPLE BUILDINGS
- FOUNDATION PLAN AND DETAILS (PLANS TO SHOW COMPLIANCE WITH CITY OF BRYAN MINIMUM FOUNDATION STANDARDS OR AN APPROVED ENGINEERED DESIGN PRIOR TO CONSTRUCTION) SEE SHEET A0.1
- EXTERNAL HVAC UNITS WILL BE INSTALLED ON THE REAR OR SIDES OF RESIDENCE ONLY. UNITS ARE TO BE PLACED OUT OF CRITICAL PATHS.
- EXTERNAL ELECTRICAL PANEL LOCATIONS SHALL BE LOCATED ON THE REAR OR SIDES OF RESIDENCE ONLY.
- SEE THE "CITY OF BRYAN RESIDENTIAL BUILDING PERMIT APPLICATION REQUIREMENTS" FOR LIST OF DETAILS REQUIRED TO FINISH THIS SET OF DRAWINGS.







NOTE: REFER TO ATTACHED SPECIFICATIONS  
SECTION 09900 EXTERIOR PAINTS AND  
COATINGS FOR ALL EXTERIOR FINISHES.







**CITY OF BRYAN**  
*The Good Life, Texas Style.*

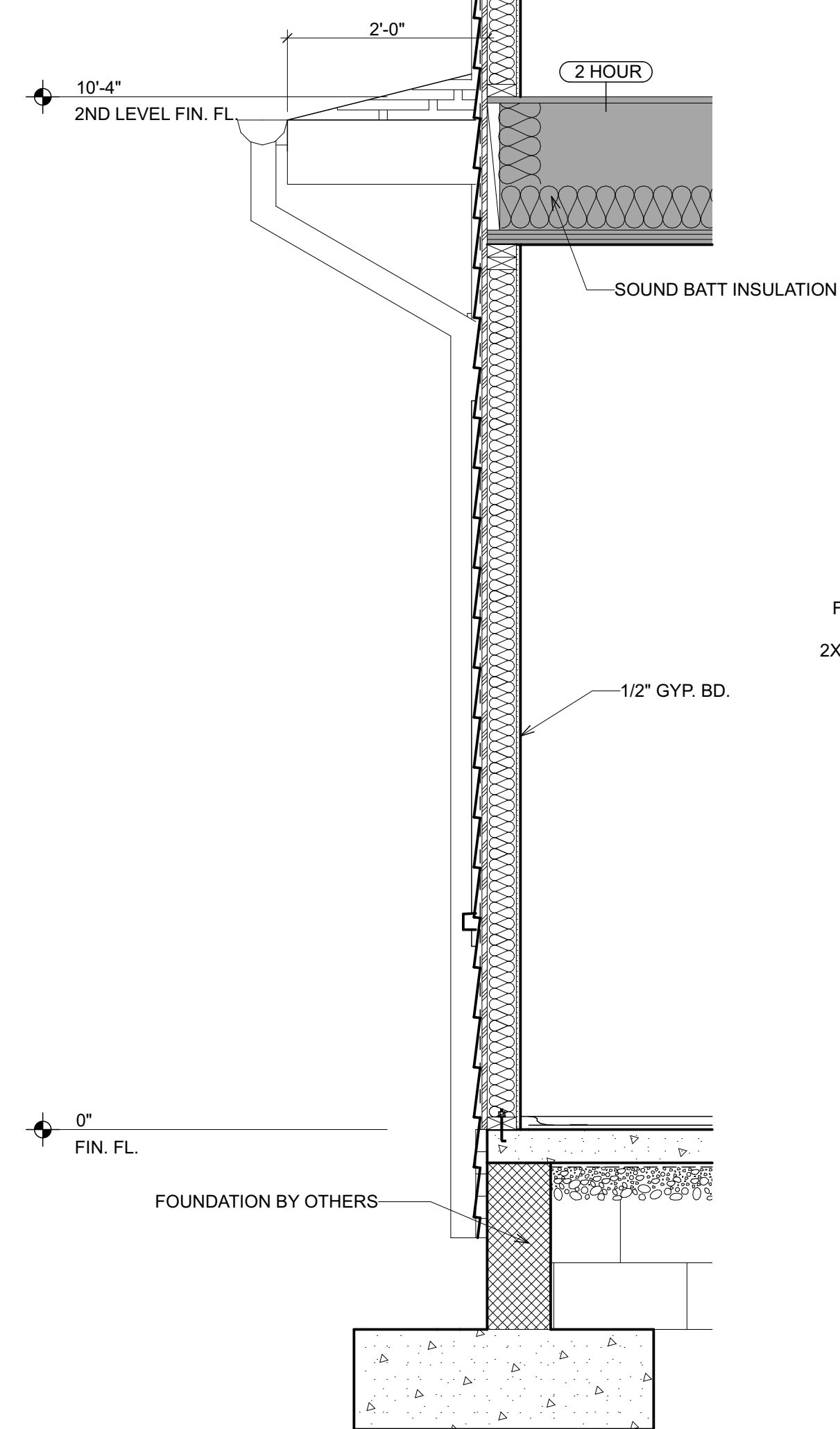
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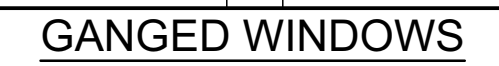
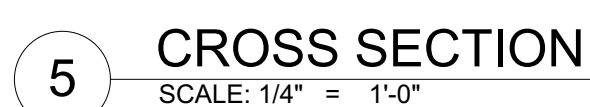
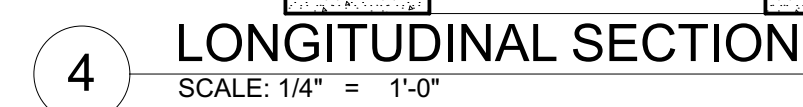
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**A4**



3 TYPICAL FIBER-CEMENT WALL SECTION  
SCALE: 3/4" = 1'-0"



## 1 TYPICAL WINDOW CASING DETAILS